

The Basenji Annual Estrus: African Origins

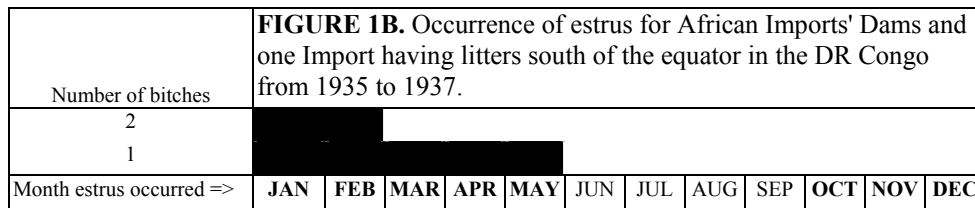
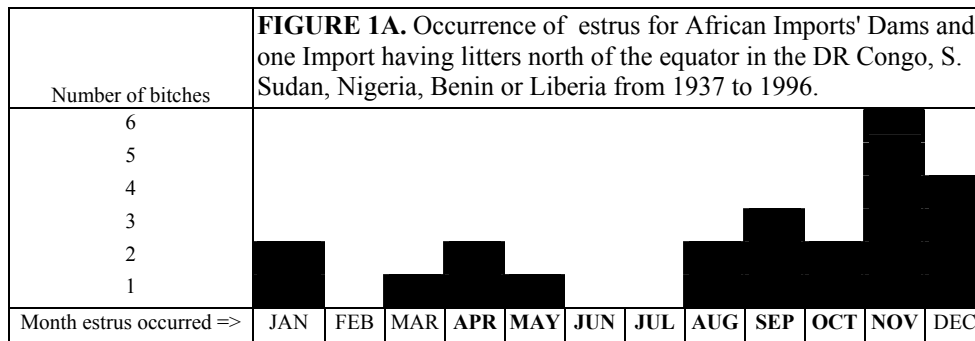
by James E. Johannes

Introduction

The Basenji is the only breed, out of 150 currently recognized by the AKC, to have an annual estrus cycle. Unlike the other breeds that have two estruses anytime during the year, the Basenji's annual estrus is seasonal. For the most part, estrus occurs within the months of September and October for Basenjies living in the Northern Hemisphere. Breeders have also noticed a second estrus sometimes occurs around March or April. In England many Basenjies have a second estrus (Burns, 1952). This has created some concern that the Basenji is losing its annual cycle since leaving Africa. The tendency for a second annual cycle has existed in Africa and in the Bitches imported from Africa.

The estrus cycle in Africa

Using birth dates of Basenjies imported from Africa (Coe, 2001), two figures were created showing the estrus of the Imports' Dams in Africa. Figure 1A shows the occurrence of estrus for Basenjies north of the equator, and figure 1B for Basenjies south of the equator. The estrus cycle for Basenjies south of the equator is opposite of those north of the equator. As noted by Ford (1997) an American Basenji imported into Rhodesia switched its annual estrus to the spring. To find the estrus start date for the Imports' Dams two methods were used. If only the month and date of the Imports birth was known, then the date of estrus was determined by counting back two months. For those Imports with a complete birth date, date of estrus was determined by counting back 70 days using the same method employed by Scott and Fuller (1965). Only those Imports where the area discovered in Africa was known were included. Two African Imports were also included who had litters in Africa, one north and the other south of the equator. The date for the start of estrus for these two African Imports was calculated from their litters' birth date.

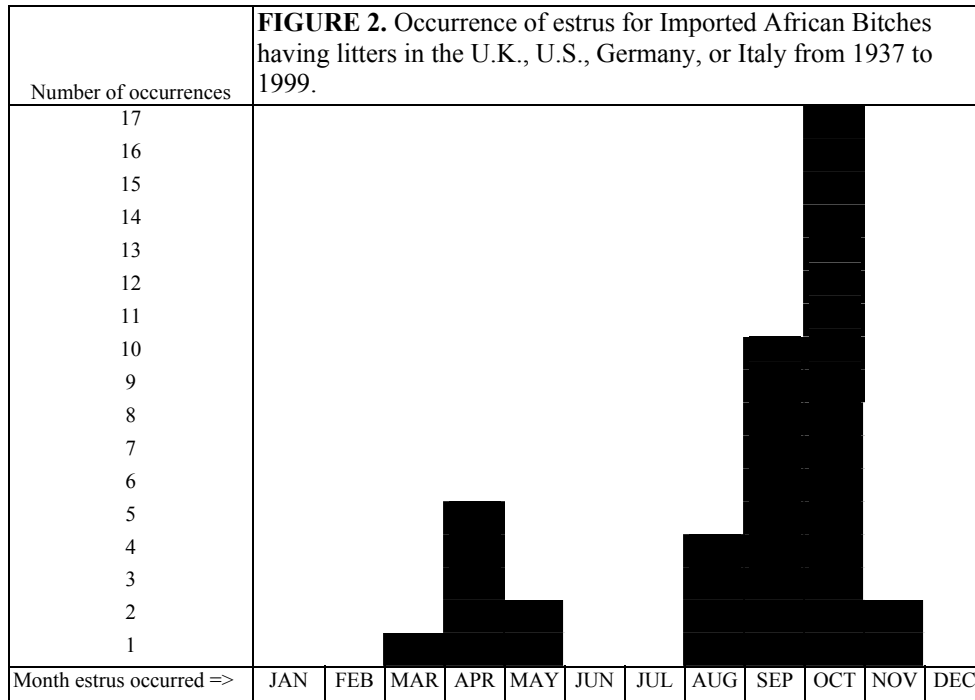


African rainy season indicated by months in bold (Dry season can vary from 4 to 2 months depending on latitude).

The number of estrus recorded (30) is probably not high enough to be statistically significant, but a trend does appear. In figure 1A the majority of estruses occur around November resulting in most litters being born during the dry season. What is most interesting is that a second estrus peak shows up in March through May. Most of these litters would be born in the middle of the rainy season. For the bitches south of the equator, figure 1B shows estruses occurs from January to May. Their litters were born during the end of the rainy season and start of the dry season.

Imported African Bitches

To see if the pattern in Africa would continue with the Imported African Bitches having litters out of Africa the same methods in compiling figures 1A and 1B were used to create figure 2. All litters were born north of the equator. There were 19 bitches having a total of 41 litters.



The Bitches imported out of Africa show a similar pattern as figure 1A. Two peaks appear during the same time of the year. The majority occurred between August and November with a smaller number between March and May. One of the original imports was recorded having a litter about 5 months apart. Amatangazig of the Congo had borne a litter on January 1, 1942 and on June 10, 1942.

Conclusion

While the Basenji for the most part has a seasonal annual cycle there is a tendency for some Basenjies to have a second estrus. This pattern originated in Africa and continued in the first generation out of Africa.

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